

October 01-02, 2018
Frankfurt, GermanyIpsa Pandya, Clin Dermatol Res J 2018, Volume 3
DOI: 10.4172/2576-1439-C1-002

SERUM ZINC AND COPPER LEVELS AND CU:ZN RATIO IN CHRONIC PLAQUE PSORIASIS: A CASE-CONTROL STUDY OF 50 CASES

Ipsa Pandya

Waves Wellness Clinic, India

Introduction: Zinc and copper are important cofactors and modulators of many critical biological functions in different dermatological diseases including psoriasis as they are involved in a number of cellular metabolic activities.

Objectives: To study the levels of serum zinc, serum copper as well as copper/zinc (Cu: Zn) ratio in psoriasis and the role of Cu: Zn ratio as a marker of severity of psoriasis.

Methods: Fifty patients of the age group of 20-50 years having chronic plaque psoriasis were studied along with 50 ages and sex matched healthy controls. Patients with psoriasis area severity index (PASI) less than 10 were considered as mild psoriasis and PASI greater than 10 considered as moderate to severe psoriasis. Serum zinc and copper were studied using the colorimetric method and analyzed by a fully automated biochemistry analyzer.

Results: Patients with moderate to severe psoriasis have higher (121.29±42.75) mean serum copper levels than controls (99.9±23.1, p=0.0049) but there is no significant difference in serum copper level between mild and moderate to severe psoriasis (P=0.2265). Patients with moderate to

severe psoriasis have lower mean serum zinc (66.38±24.33) than controls (82.4±15.9, p=0.0006) but there is no significant difference in serum zinc level between mild and moderate to severe psoriasis (P=0.1607). Also, patients with moderate to severe psoriasis have higher mean serum copper/zinc ratio (2.04±1.04) than those with mild psoriasis (1.54±0.71) and controls (1.2±0.3). Serum copper/zinc ratio correlates significantly with PASI and can be used as a marker for assessing the severity of the disease.

Conclusion: This study suggests that serum copper/zinc ratio is the better marker for assessing the severity of psoriasis. Moreover, the therapeutic potential of these findings needs to be explored.

Biography

Ipsa Pandya is an Assistant to Editor-in-Chief of Indian Journal of Sexually Transmitted Disease and AIDS. She awarded the first prize for paper presentation in mid-year scientific program of Indian Association of Dermato venereo leprologist in 2014, Gujarat. She is member of International Society of Dermatology.

niip257@yahoo.in